

104874-142119  
PATENT**REMARKS/ARGUMENTS**

Claims 1-13 and 16 are in this application. Claims 14-15 and 17-20 have previously been cancelled.

**Rejections Under 35 U.S.C. 103**

Claims 1-9 and 16 have been finally rejected under 35 U.S.C. 103 as obvious in view of U.S. Patent No. 4,291,079 (Hom) or U.S. Patent No. 5,653,836 (Mnich et al.) in combination with U.S. Patent No. 3,800,121 (Dean et al.). As expressly set forth in independent Claims 1 and 16 of this application (as well as the remaining claims ultimately dependent thereon), the present invention is directed to an acoustic panel and an engine nacelle inlet lip comprising an ice protection system which incorporates an acoustically permeable structure. The structure is thermally insulated from the front skin of the nacelle. See, e.g. paras. [0010]-[0011], [0029]-[0030] and Figs. 2A, 2B, 4 and 5 of the application as filed.

As acknowledged by the Examiner, Hom and Mnich et al. disclose acoustic panels, but are silent as to incorporation of an ice protection system and an insulation element. See Office Action, p. 2. In an attempt to overcome these defects in Hom and Mnich et al., the Examiner asserts that Dean et al. teaches an ice protection system that has an acoustically permeable structure and insulation elements, and that one of ordinary skill in the art would therefore find the claimed invention obvious in view of the combined teachings Hom or Mnich et al. and Dean et al.

However, it is again respectfully submitted as a threshold matter that the Examiner has failed to establish the *prima facie* obviousness of Claims 1 and 16. It is axiomatic that the mere fact that references can be combined or modified does not render the resultant combination

104874-142119  
PATENT

obvious unless the prior art also suggests the desirability of the combination. *See* MPEP § 2143.01 at p. 2100-131 (Rev. 2, May 2004). Moreover, to establish *prima facie* obviousness based upon the assertion that the references relied upon teach that all aspects of the claimed invention were individually known in the art, the Examiner must provide some objective reason to combine the teachings of the references. *See id.* In the present case, the Examiner has not provided any reason why one of ordinary skill in the art aware of the acoustic panels of Hom or Mnich et al. would be motivated to look to the ice protection system of Dean et al.

Moreover, it is respectfully submitted that Dean et al. fails to make any statement regarding the acoustic permeability of its ice protection system, and the Examiner's conclusions that the Dean et al. system is acoustically permeable is pure speculation. Further, from an engineering standpoint, the Examiner's assertion that Dean et al. teaches an ice protection system having an acoustically permeable structure is incorrect. Fig. 2 of Dean et al. is directed to an aircraft wing having an ice protection system. In Fig. 2, an adhesive layer (11) is applied to the non-conductive fiberglass wing skin (10) and a metal foil sheet (12) is applied to the skin (10). An insulating layer (13) is applied to the sheet (12), and a metallic layer (14) is applied to the outer surface of the insulating layer (13). Insulating layer (15) is applied to the metallic layer (14), and a semi-conducting paint layer (16) is applied to the insulating layer (15). *See* Dean et al., Fig. 2 and col. 1, line 60-col. 2, line 21. Accordingly, the apparatus of Dean et al. contains two insulating layers (13) and (15). By their very nature, insulating layers will not be acoustically permeable, and the Examiner has failed to offer any objective evidence to the contrary. Thus, the Examiner has failed to establish that Dean et al. contains an acoustically permeable structure.

104874-142119  
PATENT

Accordingly, even assuming *arguendo* that one of ordinary skill in the art would be motivated to combine the acoustic panels of Hom or Mnich et al. with the ice protection system of Dean et al., there is no teaching or suggestion that the multi-layered, insulated structure of Dean et al. could successfully be employed as an acoustically permeable structure. Accordingly, it is respectfully submitted that Claims 1 and 16, as well as the remaining claims ultimately dependent thereon, are nonobvious and patentable over Hom or Mnich et al. in combination with Dean et al.

Claims 10-13 have been rejected under 35 U.S.C. 103 as obvious in view of Hom or Mnich et al. as modified by Dean et al., and further in view of U.S. Patent No. 4,514,619 (Kugelman et al.) or U.S. Patent No. 4,036,457 (Volkner et al.). However, as set forth above, it is respectfully submitted that Claim 1 is nonobvious and patentable over Hom or Mnich et al. in combination with Dean et al. Accordingly, it is respectfully submitted that Claims 10-13 (which are all ultimately dependent on Claim 1) are nonobvious and patentable in view of Hom or Mnich et al. as modified by Dean et al., and further in view of Kugelman et al., or Volkner et al.

### CONCLUSION

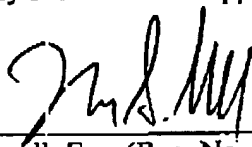
Based on the foregoing amendments and remarks, favorable consideration and allowance of all of the claims now present in the application are respectfully requested. Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the

104874-142119  
PATENT

Examiner feel that a personal discussion might be helpful in advancing this case to allowance,  
the Examiner is invited to telephone the undersigned.

The Commissioner is authorized to charge any required fees, including any extension  
and/or excess claim fees, any additional fees, or credit any overpayment, to Goodwin Procter  
LLP Deposit Account No. 06-0923.

Respectfully submitted for Applicant,



\_\_\_\_\_  
Louis S. Sorell, Esq. (Reg. No. 32,439)  
GOODWIN PROCTER LLP  
599 Lexington Avenue  
New York, NY 10022  
(212) 459-7421